

## 5-2 Alcohol- and/or Drug-Related Driving

Alcohol/drug-related crashes accounted for 10.2% of all reported traffic crashes during 2009. This is a slight decrease from the year before, but is still among the highest percentage for all years since 1996. Although this is higher than the beginning of the decade, it is still far below the 22.3% of alcohol-related crashes reported during 1983.

Alcohol/drug-related crashes tend to result in more severe injuries than do crashes with no impairment. During the early 1980's, injuries related to alcohol accounted for as much as 36% of the total. Last year, alcohol/drug-related injuries were at 17.9% of all injuries, making the percentage more in line with the percentages seen at earlier this decade. Table 20 presents the alcohol/drug-related crash counts.

Table 20
Alcohol- and/or Drug-Related Crashes & Injuries

	Grasnes -				injuries in			
Mear :	Alcohol/Drug Related	Z All	Percent of All	Alcohol/Drug	All	Percent of All		
2000	2,211	22,254	9.9%	1,824	10,798	16.9%		
2001	2,035	21,846	9.3%	1,652	8,982	18.4%		
2002	2,288	23,527	9.7%	1,745	10,086	17.3%		
2003	2,173	23,160	9.4%	1,638	9,632	17.0%		
2004	2,113	21,783	9.7%	1,767	9,263	19.1%		
2005	2,182	22,373	9.8%	1,623	9,211	17.6%		
2006	2,243	22,186	10.1%	1,816	9,470	19.2%		
2007	2,273	21,829	10.4%	1,771	9,067	19.5%		
2008	2,313	21,971	10.5%	1,645	8,465	19.4%		
2009	2,138	20,967	10.2%	1,319	7,351	17.9%		
Chg 1 Yr	-7.6%	-4.6%	-3.1%	-19.8%	-13.2%	-7.7%		
Chg 5 Yr	-3.9%	-4.8%	+1.0%	-23.5%	-19.2%	-5.4%		

Source: Montana Department of Transportation - Safety Management System

In the past, the National Highway Traffic Safety Administration (NHTSA) has used both the percentage of fatalities that are alcohol-related and the alcohol-related fatality rate (number of alcohol-related fatalities divided by the number of vehicle miles travelled) as performance measures for the states. This data can be compiled by NHTSA through the use of the Fatal Analysis Reporting System (FARS) database and state vehicle miles travelled estimates.

Currently, NHTSA is requiring states to report the number of fatalities involving a driver with a BAC of 0.08 and above. Every state now has a law that describes impaired drivers as having a BAC of 0.08 and above (driving with an illegal *per se* BAC level). The FARS database records the results of BAC tests from the Montana Forensics Lab. If no test is performed or received, the alcohol code is generated by NHTSA using a number of other crash factors through a mathematical procedure. The FARS data is considered the most accurate alcohol data available; however, timeliness is a problem with the FARS data since results from NHTSA are usually not available for over 9 months after the end of a calendar year.

The data in Table 21 is based upon FARS data and shows both alcohol-<u>related</u> fatality information (driver BAC = 0.01+) and alcohol-<u>impaired</u> fatality information (driver BAC = 0.08+).

Table 21
Alcohol Fatalities & Fatality Rates

	Alcoho	l-Related Fa BAC = 0.01+		Alcohol-Impaired Fatalities 10 BAC = 0.08+			
Year	Total Alc-Related Fatalities	Percent of All Fatalities	Alc-Related Fatality Rate	Total Impaired Fatalities	Percent of All Fatalities	Impaired Fatality Rate	
2000	117	49.4%	1.19	-	•	_	
2001	104	45.2%	1.04	96	41.7%	0.96	
2002	126	46.8%	1.20	106	39.4%	1.01	
2003	128	48.9%	1.17	102	38.9%	0.94	
2004	106	46.3%	0.95	97	42.4%	0.87	
2005	124	49.4%	1.11	105	41.8%	0.94	
2006	126	47.9%	1.12	103	39.2%	0.91	
2007	124	44.8%	1.10	106	38.3%	0.94	
2008	103	45.0%	0.96	91	39.7%	0.84	
2009*	104	47.1%	0.94	94	42.5%	0.85	
Chg 1 Yr	+1.0%	+4.6%	-1.1%	+3.3%	+7.0%	+1.2%	
Chg 5 Yr	-10.8%	+0.8%	-9.8%	-6.4%	+5.6%	-5.3%	

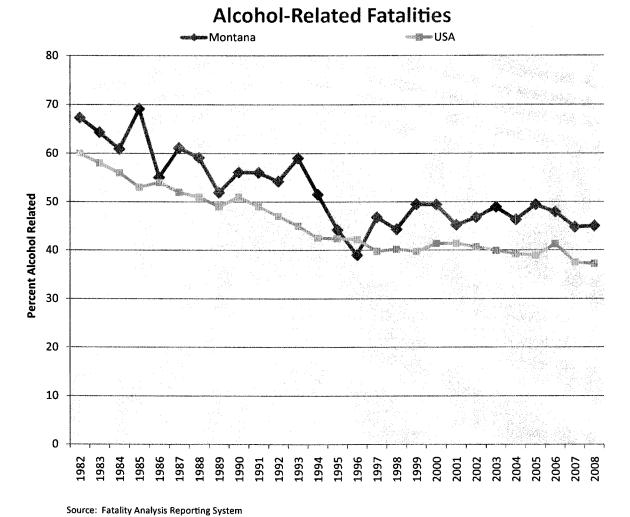
Source: Fatality Analysis Reporting System

<sup>\*</sup> The 2009 numbers have not been officially released by NHTSA, therefore these numbers are still preliminary.

<sup>-</sup> Prior to 2001, alcohol-impaired BAC was reported as 0.10+.

Figure 14 compares the Montana percentage of alcohol-related crashes with the national percentage. The number of alcohol-related fatalities for 2009 has not been released by NHTSA, thus is omitted.

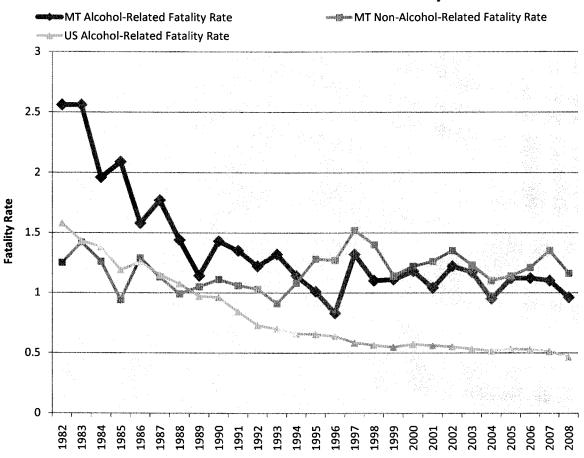
Figure 14



The Montana fatality rate during 1983 was 3.98 and the alcohol-related fatality rate that year was 2.56. During the past twenty-two years, the alcohol rate has decreased more than 62%. The lowest rate was reached in 1996 (0.83) and during the last ten years the rate has been nearly level. The alcohol-related fatality rate for 2008, the most currently available data, for the nation is 0.47 and for Montana the rate is 0.96.

The graph in Figure 14 displays alcohol and non-alcohol fatality rates in Montana since 1982. It is interesting to note that in 1995, the non-alcohol fatality rate surpassed the alcohol-related fatality rate for the first time. Although often being very close to each other, the alcohol-related fatality rate has continued to be less than the non-alcohol fatality rate since that time.

Figure 15
Alcohol versus Non-Alcohol Fatality Rate



Source: Fatality Analysis Reporting System

The rest of the alcohol data in this section is derived from the Montana Highway Patrol (MHP) crash records database and references alcohol-*related* information. The MHP data is based upon evidence and an officer's perceptions at the scene. There is no recorded BAC in the MHP database, thus limiting further analysis on alcohol-impaired crashes.

Next, we examine alcohol related crashes by county. The final column of Table 22 displays the percentage of crashes with alcohol and/or drug involvement in the county. There is a tendency for the larger urban counties to have a lower percentage of alcohol involvement in crashes. It is not known whether this implies counties with higher populations truly have less alcohol involvement because of alcohol education and related activities, or whether the large number of fender benders at intersections makes the percentage of alcohol involvement lower. It is suspected that these lower percentages result from a combination of these and possibly other factors. In addition, there are some enforcement agencies that are not as precise in determining alcohol related involvement, which may cause some counties to show low percentages.

Table 22
Alcohol- and/or Drug-Related Crash Information by County
(2009 Data)

		(200	a Data)		
County	Total Crashes	Fatal Crashes*	Fatalities*	Injuries	Percent Alcohol/Drug Crashes
Beaverhead	20	2	2	11	10.9%
Big Horn	23	7	8	18	14.5%
Blaine	12	1	1	18	24.5%
Broadwater	8	0	0	6	7.3%
Carbon	28	1	1	18	14.1%
Carter	1	0	0	0	5.6%
Cascade	192	3	3	120	8.4%
Chouteau	10	2	3	14	12.3%
Custer	11	1	1	4	4.2%
Daniels	1	0	0	3	4.2%
Dawson	15	0	0	9	5.6%
Deer Lodge	19	2	2	10	19.0%
Fallon	5	0	0	5	23.8%
Fergus	26	0	0	20	10.4%
Flathead	188	6	8	120	9.6%
Gallatin	178	2	2	71	9.8%
Garfield	1	0	0	1	7.1%
Glacier	29	2	2	36	18.7%
Golden Valley	6	0	0	8	31.6%
Granite	5	0	0	3	4.1%
Hill	54	1	1	45	15.8%
Jefferson	28	3	4	15	7.8%
Judith Basin	6	0	0	3	10.0%
Lake	79	6	6	61	16.3%
Lewis & Clark	129	7	7	62	7.2%

Table 22
Alcohol- and/or Drug-Related Crash Information by County

(2009 Data)

	Part Carlot	(200)	9 Data)		
County **	Total Crashes	Fatal Crashes*	. Fatalities	Injuries :	Percent Alcohol/Drug Crashes
Liberty	1	0	0	1	7.1%
Lincoln	46	3	3	30	14.7%
Madison	17	1	1	7	10.6%
McCone	2	0	0	2	11.8%
Meagher	2	0	0	1	5.7%
Mineral	17	2	2	4	5.1%
Missoula	282	7	8	147	10.9%
Musselshell	14	0	0	15	17.1%
Park	35	3	3	12	8.3%
Petroleum	2	1	1	1	18.2%
Phillips	11	1	1	6	16.7%
Pondera	7	1	1	4	6.7%
Powder River	2	0	0	2	6.1%
Powell	10	2	3	9	5.3%
Prairie	3	1	1	1	7.3%
Ravalli	47	1	1	23	6.8%
Richland ***	18	0	0	13	6.6%
Roosevelt	29	3	3	48	27.4%
Rosebud	16	3	4	16	9.7%
Sanders	28	3	3	19	14.9%
Sheridan	5	0	0	3	8.6%
Silver Bow	41	2	4	22	5.9%
Stillwater	16	0	0	5	8.5%
Sweet Grass	11	1	1	6	9.4%
Teton	6	0	0	3	5.5%
Toole	14	0	0	9	17.1%
Treasure	2	0	0	0	5.7%
Valley	12	× 1	2	13	9.8%
Wheatland	2	0	0	1	5.4%
Wibaux	1	0	0	4	2.6%
Yellowstone	365	13	13	211	10.4%
Total	2,138	95	106	1,319	9.7%

Source: Montana Department of Transportation - Safety Management System; Fatality Analysis Reporting System

 $<sup>{}^{*}</sup>$  2009 alcohol-related fatality data has not been released by NHTSA, this data is preliminary.

Complete DUI arrest data is not summarized by any agency in Montana. Not all arrests result in a conviction for DUI, since some are dismissed or not prosecuted and others are found not guilty. In lieu of arrest data for Montana, we now present conviction data that is gathered by the Department of Justice and placed upon driver's records. This data includes out-of-state convictions for Montana licensed drivers.

Table 23
Impaired Driving Convictions

(Reported to Records & Driver Control Bureau)

	to necords (	X DITVEL COL	tioi buleau		
Conviction	2005	2006	2007	<b>1</b> 2008	2009
DUI 1st Offense	2,832	3,250	3,051	3,043	2,891
DUI 2nd or Subsequent Offense	967	1,055	1,129	1,135	1,161
BAC 1st Offense	1,698	1,722	2,066	2,202	2,165
BAC 2nd or Subsequent Offense	179	247	244	235	264
0.02% BAC (Under 21) 1st Offense	361	415	302	343	246
0.02% BAC (Under 21) 2nd or Subsequent Offense	33	25	22	13	10
Felony DUI	286	217	213	194	217
Total	6,356	6,931	7,027	7,165	6,954
Refusals to provide	e blood/br	eath evide	ence of imp	pairment*	
Refusal a Refusa	2,005	2,006	2,007	2,008	2,009
Implied Consent	1,171	1,083	1,236	1,382	1,379
P.A.S.T. (Preliminary Alcohol Screening Test)	1,243	1,330	1,533	1,445	1,519

Source: Montana Department of Justice - Motor Vehicle Division

<sup>\*</sup> A driver suspected of DUI may have more than one opportunity to provide or refuse to provide evidence of impairment. The P.A.S.T. is provided at the location of the initial stop. The implied consent test may be breath or blood and is done at a fixed base location by law enforcement (breath test) or medical personnel (blood draw).

Table 24 examines the age of the drivers that are involved in alcohol-related traffic crashes. Crash rates per licensed driver are calculated. This information can help those in the traffic safety community make decisions on targeting specific age groups concerning the drinking and driving problem. It should be noted that not all drivers involved in these alcohol crashes were drinking. While most alcohol crashes are single car crashes, when there are multiple vehicles involved, some of the drivers may not have been drinking.

Table 24
Alcohol-Related Crashes by Age of Driver

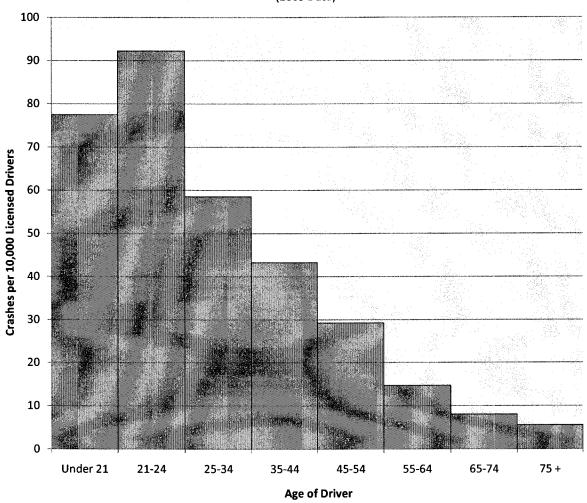
(2009 Crash Data)

Sper	Licensed Drivers (State Fiscal Year 2008)	Drivers in Alcohol Crashes	Alcohol Crashes (per 10,000 Lidenses)	Drivers in 19 Fatal Alcohol 2 Crashes	Crashes ther 10,000 Licenses).
Under 18	17,497	104	59	4	2.3
18-20	34,163	283	83	12	3.5
Under 21	51,660	<b>3</b> 87	75	16	3.1
21-24	47,641	492	103	14	2.9
25-34	123,314	637	52	21	1.7
35-44	110,650	444	40	24	2.2
45-54	145,675	397	27	15	1.0
55-64	133,647	178	13	6	0.4
65-74	77,672	78	10	4	0.5
75 +	47,705	15	3	3	0.6

Source: Licensed Drivers - Montana Department of Justice - Motor Vehicle Division;
Drivers in Crashes - Montana Department of Transportation - Safety Management System

Figure 16 shows the alcohol-related crash rates by age.

Figure 16
Alcohol- and/or Drug-Related Crashes by Age of Driver
(2009 Data)



Source: Montana Department of Transportation – Safety Management System; Montana Department of Justice – Motor Vehicle Division Table 25 examines <u>drivers</u> under age 21 involved in crashes. Those drivers involved in all crashes and in alcohol/drug related crashes are compared. It should be emphasized that the counts are for <u>drivers</u> of age 20 and under (not crashes). Although most alcohol/drug-related crashes involve only one vehicle, there could be a few instances where the young driver had not been drinking, while another older driver involved in the crash had been drinking.

Underage drivers are involved in fewer alcohol/drug-related crashes (6.8%) compared to the entire population of drivers (10.2%). However, this reflects an underage population that is drinking illegally, which, combined with driving inexperience, results in a deadly combination.

Table 25
Alcohol- and/or Drug-Related Crashes
Drivers Under 21

Yea	Young	Drivers in All (	Crashes 👂	Young Drivers in Fatal Crashes			
	Alcohol Related	All	Percent of All	Alcohol Related	All All	Percent Wof All	
2000	497	7,969	6.2%	13	49	26.5%	
2001	531	7,781	6.8%	13	40	32.5%	
2002	558	8,224	6.8%	16	47	34.0%	
2003	473	7,551	6.3%	18	57	31.6%	
2004	499	7,090	7.0%	17	39	43.6%	
2005	468	7,096	6.6%	11	37	29.7%	
2006	491	7,080	6.9%	19	37	51.4%	
2007	431	6,534	6.6%	14	32	43.8%	
2008	412	6,120	6.7%	14	33	42.4%	
2009	387	5,721	6.8%	16	40	40.0%	
Chg 1 Yr	-6.1%	-6.5%	+0.5%	+14.3%	+21.2%	-5.7%	
Chg 5 Yr	-15.9%	-15.7%	-0.2%	+6.7%	+12.4%	-5.1%	

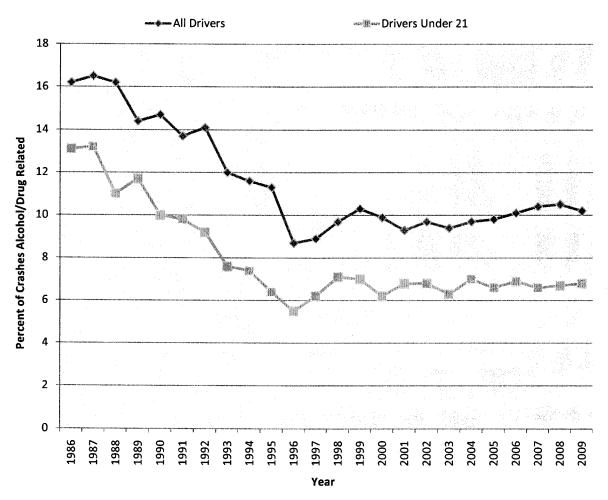
Source: Montana Department of Transportation - Safety Management System

Figure 17 examines alcohol/drug-related crashes by driver age trends over time.

Figure 17

Alcohol- and/or Drug-Related Crashes

All Drivers vs. Young Drivers



Source: Montana Department of Transportation - Safety Management System

## 5-3 Native American Fatalities

The population of Montana has little racial diversity. The 2000 census showed the following breakdown of the population, Table 26.

Table 26
Montanans by Race

Race	White	Native American	Two or More Races	Other is:	Asiah .	Black	Hawailan & Pacific Islander
Percent	90.6%	6.2%	1.7%	0.6%	0.5%	0.3%	0.1%

Source: U.S. Census Bureau - 2000 Census

The two predominant races account for 96.8 percent of the population and are the only two that contain enough data to analyze. The Fatality Analysis Reporting System (FARS) is the only available crash database that contains race information. FARS began collecting this information in 1999. All the data in this section will be summaries of fatality information.

Table 27
Fatalities by Race

	7. 1. T. 1. C. 1. State Community (1. C. 1. C. 1	10	italities by i	uuu	-CONTRACTOR CONTRACTOR CONTRACTOR	***************************************		
		Fatalities		Pei	Percentage of Total *			
Year	ا رWhite المراس	Native American	Other Races	White	Native American	Other Races		
2000	189	35	1	79.7%	14.8%	0.4%		
2001	183	37	7	79.6%	16.1%	3.0%		
2002	206	51	12	76.6%	19.0%	4.5%		
2003	206	42	7	78.6%	16.0%	2.7%		
2004	175	46	4	76.4%	20.1%	1.7%		
2005	204	34	7	81.3%	13.5%	2.8%		
2006	208	46	5	79.1%	17.5%	1.9%		
2007	227	43	5	81.9%	15.5%	1.8%		
2008	198	27	4	86.5%	11.8%	1.7%		
2009	178	34	8	80.5%	15.4%	3.6%		
Chg 1 Yr	-10.1%	+25.9%	+100.0%	-6.8%	+30.5%	+107.2%		
Chg 5 Yr	-12.1%	-13.3%	+60.0%	-0.6%	-1.9%	+81.2%		

Source: Fatality Analysis Reporting System

<sup>\*</sup> Percentages may not add to 100% because there may be 0-5% of the fatalities with race unknown.